

C71N JH  
Feb 1917

# Colorado State Teachers College Bulletin

Series XVI

FEBRUARY 24, 1917

Number 9

## Hand Book OF THE Extension Department



Dup. 18  
D. ef D.

Dup.  
D. ef D.

Published Quarterly by State Teachers College, Greeley, Colorado  
Entered as Second Class Matter at the Postoffice at Greeley, Colorado,  
under the Act of March 1, 1879

## HOW TO GET BOOKS

Books for use in the extension courses can usually be obtained from local public libraries in the principal towns.

The librarian of State Teachers' College will send, prepaid, copies of any of the books necessary for the courses, to any regularly registered extension student. Such books may be retained for a period of four weeks. A fine of five cents per week will be charged for each week or fractional part of a week if held for a longer time. Return postage must be prepaid by the student.

State Reading Circle books are not furnished by the college.

An endeavor will be made to have sufficient books on hand for all taking the courses, but in case a book is out at the time application is made for it, the application will be filed and the book forwarded promptly when received at the library. If there is undue delay the student will be notified of the cause.

D. of D.

APR 27 1917

The  
**Extension Department**  
**and Its Work**

**State Teachers College**  
Greeley, Colorado

## EXTENSION DEPARTMENT

JOHN GRANT CRABBE, A.B., A.M., Pd.M., Pd.D., LL.D., President.  
WILLIAM BARNARD MOONEY, Pd.B., A.B., A.M., Director.

---

Members of Regular College Faculty Giving Courses in the Extension Department.

JAMES HARVEY HAYS, A.B., A.M., Dean of the College, and Professor of Latin and Mythology.

ELIZABETH HAYS KENDEL, Pd.B., Pd.M., A.B., Training Teacher, Fifth Grade.

SAMUEL MILO HADDEN, Pd.B., A.B., A.M., Dean of Practical Arts. Professor of Industrial Education.

FRANCIS LORENZO ABBOTT, B.S., A.M., Professor of Physical Science.

BELLA BRUCE SIBLEY, Pd.B., Pd.M., A.B., Training Teacher, Second Grade.

GURDON RANSOM MILLER, Ph.B., A.M., Ph.D., Dean of the Senior College, Professor of Sociology and Economics.

FRANCES TOBEY, B.S., A.B., Dean of the Junior College. Professor of Reading and Interpretation.

ALLEN CROSS, A.B., Ph.M., Professor of Literature and English.

ALBERT FRANK CARTER, A.B., M.S., Librarian. Professor of Library Science.

WILLIAM BARNARD MOONEY, Pd.B., A.B., A.M., Director of Extension Service. Professor of School Administration.

JACOB DANIEL HEILMAN, A.B., Ph.D., Professor of Psychology and Child Study.

FRANK W. SHULTIS, A.B., A.M., Professor of Business Education.

JOHN T. McCUNNIFF, Pd.M., A.B., Assistant Professor of Industrial Arts, Printing and Mechanical Drawing.

GEORGE WILLIAM FINLEY, B.S., Professor of Mathematics.

MARGARET STATLER, Pd.B., A.B., Training Teacher, Third Grade. Instructor in Story Telling.

GEORGE A. BARKER, M.S., Professor of Geology, Physiography, and Geography.

AMY RACHEL FOOTE, A.B., Training Teacher, Sixth Grade.

CHARLES M. FOULK, Pd.B., Assistant in Manual Training.

GEORGE EARL FREELAND, A.B., A.M., Principal of the Elementary School.

AGNES HOLMES, Pd.M., Assistant in Industrial Arts.

JENNY LIND GREEN, A.B., Training Teacher, Seventh Grade.

WALTER F. ISAACS, B.S., Professor of Fine and Applied Arts.

MILDRED DEERING JULIAN, B.S., Training Teacher, Kindergarten.

JOHN CLARK KENDEL, A.B., Director and Professor of Public School Music.

- MARGARET JOY KEYES, A.B., Assistant in Physical Education and Dramatic Interpretation.
- MERLE KISSICK, A.B., Ph.B., Director and Professor of Household Arts.
- THOMAS C. McCracken, A.B., A.M., Dean of the Graduate College. Professor of the Science and Art of Education.
- FRIEDA B. ROHR, Pd.M., A.B., Training Teacher, Fifth Grade.
- EDWIN B. SMITH, B.S., A.M., Professor of History and Political Science.
- LEVERETT ALLEN ADAMS, A.B., A.M., Ph.D., Professor of Biology.
- CHARLES JOSEPH BLOUT, A.B., A.M., Instructor in Physics and Chemistry, High School.
- EDWIN STANTON DUPONCET, A.B., Ph.D., Professor of Modern Foreign Languages.
- JOHN C. JOHNSON, A.B., M.S., Assistant Professor of Biology.
- ADDISON LEROY PHILLIPS, A.B., Professor of English.
- EDGAR DUNNINGTON RANDOLPH, A.B., A.M., Professor of Sociology.
- FLORENCE REDIFER, A.B., Instructor in Household Science.
- GLADYS IRENE SCHARFENSTEIN, Ph.B., Instructor in Household Science and Arts.
- JOSEPH HENRY SHRIBER, A.B., Director of County School Administration.
- JEHU BENTON WHITE, B.S., Professor of Commercial Work.
- GRACE WILSON, Pd.B., A.B., Assistant to the Dean of Women.
- FRANK LEE WRIGHT, A.B., A.M., Professor of Education.
- BERTHA MARKLEY, Pd.B., Pd.M., Training Teacher, Eighth Grade.
- LELA AULTMAN, Pd.B., Pd.M., Training Teacher, First Grade.
- CLARA HARRISON TOWN, B.S., Ph.D., Assistant Professor of Psychology and Child Study.
- SAMUEL E. ABBOTT, M.D., Director of Physical Education.
- RUETTA DAY, B.S., Instructor in Household Science.

## INTRODUCTION

The Extension Department of the Colorado Teachers College is organized and exists for the following purposes:

- (1) To assist, thru cooperative effort, State, County, and District school officials in their efforts to improve the efficiency of their schools.
- (2) To give instruction to teachers in service and to extend the service of the institution to all persons who wish to work under its guidance.

The Department is ready to render service to State, County, and District school officials. A request for assistance in any work connected with education in Colorado will receive prompt attention.

Systematically organized instruction is given to teachers under the following plans:

### THE GROUP PLAN

A. A person who possesses at least the degree of A.B., or its substantial equivalent, and has had professional training and experience that would justify his appointment as a regular instructor in the College, may be appointed an Extension Instructor. He gives the Course under the general direction of the College, but his relations to his students is about the same as they would be were he giving instruction to them within the institution. He receives a percentage of the fee paid by his students for his services. Members of the College faculty give instruction to outside groups under this plan.

B. A person who does not possess the above qualifications may be appointed a Class Leader. The Class Leader keeps the required records of the members of his group, leads in the work of the Class and otherwise acts as the director of the work his group is studying under the direction of the College. The Class Leader is allowed the same credit as other members of his group. He does not pay a fee for his course.

### THE INDIVIDUAL PLAN

Under this plan any person who desires to study alone or who cannot join a study group may do work under the direction of the College. All of this work is done by Syllabus. Fifteen syllabi or study units constitute a five-hour course, twelve study units a four-hour course; nine study units a three-hour course, six study units a two-hour course, and three study units a one-hour course. Thus one of these study units equals four recitation lessons in residence.

By the Group and Individual Plans of Study a student may take practically any course offered in residence by the College.

**HOW THE INDIVIDUAL WORK IS CONDUCTED**

On receipt of the required fee and postage we shall send you the first three study units of your course and the required books for these units. You should do the work in the first study unit and return it to the Extension Department. It will be given to the instructor offering the course. He makes his notations and grade on the paper and returns it to the Extension Department. We shall then send it to you. When we return the first study unit to you, we shall enclose the fourth study unit and when we return to you the second study unit, which your teacher has corrected, we shall enclose the fifth study unit and so on until the course is completed. In this manner you will always have two study units, upon which you may be working, while the one you have mailed us is being corrected and returned to you. At the close of the Course you will have in your possession a series of valuable papers on the Course you have taken.

**How the Group Work Is Conducted**

Under the general supervision of the Extension Department of the College extension instructors are allowed to conduct their classes as they think best. If Courses are selected that are printed in this bulletin the syllabi of these Courses will be furnished extension instructors if they wish them. The same rules and regulations that govern regular instruction in the college will govern these instructors and the reports they make to the College will be the same, as far as possible, as those made by regular members of the faculty.

Class leaders will use the syllabi of the Courses selected and will make such reports as may be required.

**INSTITUTE WORK**

A person employed in a Colorado teachers' institute, who can qualify as an extension instructor, may have courses of a professional character, which he plans to give in the institute, approved by the Extension Department of the College. Such courses will be recognized for credit in the College, and a limited number of these courses may be taken for credit in the College by a student in the institute. A charge of one dollar is made for the registration of these credits regardless of the number of credit hours the student takes or is allowed to take. At present not more than four hours credit may be so earned in any given institute.

**State Reading Circle Course**

Groups may be organized for the purpose of studying the books selected by the State Reading Circle Board. These groups may work under the direction of an Extension Instructor or a Class Leader in the same way and under the same conditions as regular Group work described on page 4.

This Reading Circle work may be taken also on the Individual Plan described on page 4.

At present three hours credit is given for this work to persons in the Junior College only. The fee is one dollar per credit hour or three dollars for the course whether taken under the Group or Individual Plan.

### WHO MAY TAKE EXTENSION COURSES

Any teacher in active service may take Courses offered in this bulletin. Any other person desiring to study under supervision may enroll as a regular or special student. If a student wishes to become a candidate for graduation, however, he must fulfill the entrance requirements. To aid students who lack entrance requirements we offer High School Courses on the Extension plan. Any person interested in such courses should write for our High School Extension Bulletin.

### HOW TO BEGIN WORK

We have regularly organized study groups in most of the larger centers of the State and in many of the towns and villages. Your County or City Superintendent of Schools can give information about these. Join one of these groups if possible. If there are no organized groups you can join, write the College indicating the course you wish to take. State briefly what your previous training and experience have been and indicate the work you are now doing. If you have decided upon the course you wish to take, enclose in your letter the required fee and postage and address to Colorado State Teachers College, Extension Department, Greeley, Colorado. You may begin individual study at any time.

### THE TERM OR CREDIT-HOUR

The unit of work in residence in the College is one recitation a week for a term of twelve weeks. This is called a term hour, or credit-hour. Three of the study units in this bulletin are equal to one term hour or one credit-hour.

To complete a five hour course in group work, classes must meet 12 times for  $2\frac{1}{2}$  hours each meeting, 15 times for 2 hours each meeting or 18 times for  $1\frac{1}{2}$  hours each meeting. Each student in the group must read and give adequate reaction to approximately 1,200 pages of reading matter pertaining to the course. To earn less than five hours a proportionate number of meetings and reading work on the above bases must be arranged.

Courses requiring no preparation outside the recitation hour are credited on the basis of laboratory work—two periods of recitation or laboratory work being credited as one term-hour.

### EXTENSION COURSES OF THE REGULAR FACULTY

Regular members of the faculty of the college may give non-resident courses where arrangements can be made such as will not interfere with their regular work in the college. Courses given by regular members of the faculty under the group plan are counted as resident courses, provided that not more than 20 hours of credit may be so earned in the Junior College and 20 hours in the Senior College by any student.

**STUDENT TEACHING REQUIREMENTS****JUNIOR COLLEGE**

Two terms of teaching are required in the Elementary School.

**SENIOR COLLEGE**

Two terms are required for the third-year certificate, and two terms in addition are required for the A.B. degree. Senior college teaching is done in the high school and elementary school. Those who are majoring or specializing in any phase of elementary education may do all of their teaching in the elementary school.

In either college no one is to be excused from all the teaching requirements, but teachers of long experience and high standing may be excused from a part of the requirements. Those who take non-resident teaching will be given more consideration from this standpoint than those who have done no teaching in connection with the college.

**THE GRADING SYSTEM**

Students who do work of high quality are marked "A," and receive credit for the number of hours scheduled for the course. Those who do work of unusually high quality are marked "AA," and receive credit for 20 per cent more than the normal hours allowed for the course. Work of only fair quality is marked "B," and 20 per cent is deducted from the normal allowance. Work of poor quality is marked "C," and 40 per cent is deducted from the normal allowance.

5AA indicates 6 hours credit.

5A indicates 5 hours credit.

5B indicates 4 hours credit.

5C indicates 3 hours credit.

F indicates a failure in the course.

These marks go on the permanent records and stand as an indication of the quality of the work done by the student, and are useful for instructors when they recommend graduates for positions.

**FEES**

With the exception of the courses in Modern Languages, when taken by the dictaphone method as indicated on page 43 and the fee required for the registration of institute credits, the fee for Extension work is one dollar per credit hour whether the Course is taken on the Group or Individual Plan. Therefore a five-hour course will cost five dollars, a four-hour course four dollars, a three-hour course three dollars, a two-hour course two dollars, and a one-hour course one dollar. The full amount of the fee for any course must be sent at one time together with

the required postage for books. The postage for a five-hour course is fifty cents, for a four-hour course forty cents, for a three-hour course thirty cents, for a two-hour course twenty cents, and for a one-hour course ten cents. If the student wishes to furnish his own books, the postage need not be sent. Hence if the student wants us to furnish the books a five-hour course will cost five dollars and fifty cents, a four-hour course four dollars and forty cents, a three-hour course three dollars and thirty cents, a two-hour course two dollars and twenty cents, and a one-hour course one dollar and ten cents. *All fees, including postage, are payable in advance.*

#### **General Regulations Governing Extension Study**

1. Students in residence are not allowed to study under the Extension Plan of Study.
2. A student may earn not more than 15 hours of credit in any one school year. This applies to both group and individual students.
3. Courses outlined in this bulletin must be approved in advance by the Dean of the Graduate College before they can be applied toward A.M. credit.

#### **Directions to Extension Students**

1. Each manuscript submitted must have indicated on the first page the following items:
  - a. Student's Name and address.
  - b. The name and number of the Course.
  - c. The school where the teacher is now teaching, and the grade of work.
2. As soon as you complete a study unit send it to the Colorado Teachers College, Extension Department, Greeley, Colorado. *Do not send manuscripts to your instructor.*
3. Use paper of fair to good quality, size 8½x11. Use typewriter or pen. Leave a liberal margin for instructors to use in correcting your paper. Use both sides of the paper if you wish. Papers are more easily handled when but one side is used. See that your paper is correctly paged and the sheets properly attached before mailing. Papers sent by mail require letter rates.
4. Fees with the required postage are payable in advance. No exception is made to this rule for either individual or group students.

#### **Opportunity to Establish Standing**

It is the intention of the College to give every teacher in Colorado an opportunity to establish his standing in the college, and then give him an opportunity to file a permanent record of his progress in the profession. This record becomes a professional asset which, in this day of specialties, no teacher can afford to be without. On request the college

will furnish a "standing sheet" upon which the applicant may give a record of his work under the following general headings:

1. Scholastic Work.
2. Higher Education.
3. Teaching Experience.
4. Life Experience.

## ORGANIZATION OF THE COLLEGE

### Information for Students

The College is organized into five distinct divisions:

1. The Graduate College;
2. The Senior College;
3. The Junior College;
4. The High School;
5. The Elementary School, including the Kindergarten.

The Graduate College is organized for work leading to the degree of Master of Arts in Education.

The Senior College embraces the work usually done as third and fourth year college work, and leads to the degree of Bachelor of Arts in Education and the life certificate to teach in Colorado.

The Junior College embraces all the work done in the first two years of the college proper. This work leads to the Junior College diploma and the life state teachers' certificate.

The High School and Elementary School divisions make up the Training Department of the Teachers' College, and need no fuller explanation.

(For the conditions of entrance, required work and other details concerning the above colleges and departments of the institution consult the latest annual catalog.)

# THE DEPARTMENTS

## OUTLINES OF COURSES OF STUDY

---

### PSYCHOLOGY AND CHILD STUDY

JACOB DANIEL HEILMAN, Ph.D.

CLARA HARRISON TOWNE, Ph.D.

The main purpose of the courses in Psychology and Child Study is to improve the student's ability to care for, train and educate the child by means of studying the child's nature, normal development and natural modes of learning.

#### 1. Child Hygiene. (Required in the first year.)

The preservation of the child's health is believed to be of fundamental importance in the work of the school. The following topics will be treated in the course: The significance, prevention and detection of sensory defects; malnutrition; faulty postures and deformities; hygiene of the mouth; the air required by the child. 5 hours—Dr. Heilman and Dr. Towne.

#### 2. General Psychology. (Elective Junior, and Senior College.)

The materials, methods, purposes and main conclusions of psychology will be treated in this course. 5 hours—Dr. Heilman and Dr. Towne.

### EDUCATION

THOMAS C. McCracken, A.M.

FRANK L. WRIGHT, A.M.

WILLIAM BARNARD MOONEY, A.M.

SAMUEL MILO HADDEN, A.M.

JOSEPH H. SHRIBER, A.B.

GRACE H. WILSON, A.B.

The work of this department, although having to do primarily with fundamental theory underlying the educative process, shows also how such theory is of practical value to the teacher. The teacher needs a theoretical background for her work and a broad acquaintance with all fields of educational activity. The purpose of the courses offered is to meet these needs.

**Courses Primarily Junior College**

**8. Educational Values.** The purpose of this course is to give the student a critical attitude in regard to the educational value of the various subjects of the curriculum.

The first part of the course will be an enumeration of the aims of education, and the subjects in the curriculum by the study of which these aims or ends are realized. In the next few lessons the student will be expected to study the theory of educational value as set forth by Bagley in his "Educational Values."

The last part of the course will be given to a practical consideration of educational values. The student will make a detailed study of textbooks in at least two fields, one of which may be a high school subject. If the student prefers to make both studies of high schools texts, he should communicate with the instructor in charge. These texts are to be studied from the standpoint of the relative value of (a) method of presentation of material, (b) order and sequence of the various topics, and (c) topics or parts of the text which should be eliminated entirely because of lack of evidence of their being of educational value.

A thesis on the relative value of the method of presentation of some subject as it was presented to the student, and as it is being presented in up-to-date schools at present, will also be expected.

This is a practical course for any teacher, as he will be made to criticise the material he presents and will perhaps be led to eliminate certain topics he now teaches. 3 hours—Mr. Wright.

**10 and 32. The History of Education in Ancient, Mediaeval and Renaissance Times.** A general survey of the history of education up to and including the Renaissance will be made in this course, with special emphasis upon the Greek, the Roman, and the Renaissance periods. An effort will be made to show the influence of the various movements in these periods, upon the education of our own times.

The course is especially beneficial to one majoring or especially interested in history. 3 hours—Mr. Wright.

**11. Principles of Education.** Required second year. This course is designed to set forth the theory of aims, values, and meaning of education; the place of a scientific basis in education; the relation of schools to other educational institutions; the social limitations upon the work of the schools; the types of schools necessary to meet the needs of society; and the processes of learning and teaching. 5 hours—Mr. McCracken and Mr. Wright.

**12a. Current Movements in Social Education.** This course will include such subjects as the following: The school as a social center; school credit for home industrial work; open air schools; organizations cooperating with the public schools; the six-three-three-plan; consolidation of schools; the school survey; medical inspection in schools. 3 hours—Mr. McCracken.

**12b. Current Movements in Social Education.** This course will deal with the subjects of vocational education and vocational guidance. 3 hours—Mr. McCracken..

**24. School Administration.** This course deals more particularly with school and class management as it relates to the teacher and the school principal. A part of the course is given to the study of cooperation between teacher and principal in instruction, discipline, etc. There will be some time given also to a study of the recent school legislation in Colorado.

Other topics arising in the course are:

- (a) Some errors the new teacher often makes and some things she ought to know.
- (b) Nature, kinds, and development of conduct.
- (c) Teaching children to think.
- (d) Teaching children to execute.
- (e) School room government; fair play in the school room.

This is a good course for any teacher in the field who has not had courses in education. It is particularly good for the teacher of little or no experience. 3 hours—Mr. Wright.

**25. Administration of Rural and Village Schools.** This course is a study of the history of rural school organization and administration in our country from primitive local needs to the present time. It aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education, and a discussion of forward movements in legislation as they affect the education of rural children. 3 hours—Mr. Shriber.

**33. History of Modern Elementary Education.** Students who have not had Education 10 or its equivalent, will be expected, in the first few lessons, to review the features of the Renaissance which influence materially the men and movements of modern education. While the entire field of modern education will be covered to a certain extent, the main part of the course will be devoted to the study of modern elementary education. Such subjects as the development of the vernacular schools, the early religious basis of elementary schools, and the transition to a secular basis, together with the work of such men as Cominius, Locke, Rousseau, Pestalozzi, Herbart and Froebel, will be emphasized. 3 hours—Mr. Wright.

**38. Vocations for Women.** A course designed for the study of vocations open to women, with the idea of preparing the teacher to guide her students in the choice of their life work. The course consists of a study of women in industry, agriculture, commercial work, the professions, such as nursing, library work, and medicine. 2 hours—Miss Wilson.

**Courses Primarily Senior College**

**20. High School Administration.** This course will deal with the organization, management and administration of the high school, a critical examination of one or more typical high schools, emphasizing courses, programs of study, daily schedule of classes, records and reports, equipment, training, qualification and work of the teachers and other similar matters of high school administration. The student will be allowed to select topics in which he is especially interested, for study and research, under the direction of the instructor.

This is a valuable course for any high school teacher or principal.  
3 hours—Mr. Wright.

**28. Comparative School Systems.** In this course one makes a rather comprehensive study of the school systems of England, France, and Germany, comparing each with the other and finally emphasizing the points to be found in each system which seem especially applicable to our own American system. Other countries which excel in any particular line are studied from that particular standpoint. For instance, Denmark is studied because of its recognized standing in rural education.

Early in the course, a number of thesis topics like the following will be presented, from which the student may select for the purpose of making comparisons of the various countries.

1. Compare the curricula for the secondary schools of the various countries.
2. Compare the countries as to teachers' preparation, term of office, salary, interest in their work, etc.
3. Compare the countries as to emphasis placed upon physical education.

In the last part of the course, a study of modern movements in Education in the various countries will be made.

This course is more easily taken by students who have access to some library facilities. 5 hours—Mr. Wright.

**30. Rural Education.** A course intended, primarily, to give a comprehensive grasp of American rural history, and a brief study of the rural educational systems of this and other countries. After the problem is considered in its historical and sociological aspects resulting from a long national evolution, the present as well as the best type of rural school will be studied as a factor in preparing for an efficient citizenship. The fundamental needs in rural education, the recent rural life movement, the redirection of the school, its legitimate functions and revitalizing agencies will be correlated with existing conditions in Colorado and the West and with the social and historical development of the country. 3 hours—Mr. Shriber.

**34. American Education.** A brief survey of conditions existing in Europe at the time of the settlement of the American Colonies will be considered with a view to explaining the various types of education found

in Colonial times. A study will also be made of the growth of the public school idea, the spread of education from the East to the West, and the development of state control of education.

Other topics of American education emphasized in the course are:

- (1) National land and money grants to education.
- (2) Higher and professional education.
- (3) Higher education of women.
- (4) Normal schools and the training of teachers.
- (5) Education of Defectives.
- (6) The growth of the kindergarten idea.
- (7) Modern movements in American Education.

These topics will be considered briefly historically, but more emphasis will be placed upon present-day tendencies in each of these lines.

The student will also select a topic from a list of some twenty subjects, on which he will write a thesis of from two to five thousand words. Among the topics are the following: (1) "Indian Education," (2) "Negro Education," (3) "Education of the Foreigner," (4) "The General Education Board," (5) "The Smithsonian Institution," (6) "The Carnegie Foundation for the Advancement of Teachers," (7) "Work of the Bureau of Education," and (8) "Modern Movements in Education."

This course is appropriate for principals and superintendents who are anxious to learn of progressive features in American Education. 5 hours—Mr. Wright.

**35. Educational Classics.** The purpose of this course is to study the various educational classics (a) as interpretations and criticisms of the educational practices of the various periods of history represented by them; (b) as to their influence upon the period and writers directly following; and (c) as presentations of theories and practices of present-day education.

Some of the classics to be studied are:

Plato's "Republic."

Quintilian's "Institutes of Oratory."

Cominius' "The Great Didactic."

Rousseau's "Emile."

Locke's "Thoughts Concerning Education."

Pestalozzi's "Leonard and Gertrude."

Spencer's "Education."

The latter part of the course will be given to a careful study of (a) what constitutes an educational classic, and (b) what twentieth century treatises on education are probably destined to become classics.

The course would probably appeal most to mature students in the Senior College or to mature second year people. 5 hours—Mr. Wright.

**42. Educational Administration.** In the first part of this course, the student will be given a general idea of the field of school administration by the study of Cubberley's "Public School Administration." Then he

may, if he desires, select certain lines of school administration in which he is interested, for study and research. He may make a critical examination of his own city or village system; make a survey of conditions as they exist in his own state, or county in organization, powers and duties of the Board of Education; also the qualifications, powers, duties, and opportunities of the superintendent and the principal.

Superintendents and principals will find this course helpful in the administration and critical examination of their own schools. 3 hours—Mr. Wright.

45. **Measurements of Results in Education.** There are some standardized tests which measure certain kinds of results in education. These may be used by the teacher to check up his work and the standing of each of his pupils in reading, writing, arithmetic, language, drawing, spelling, and some other subjects. Superintendents of the elementary and high school curricula may wish to give these tests and compare the standing of their schools with other schools in which the tests have been given and the results published. The purpose of this course is to give the teacher and supervisor a working knowledge of educational tests, their use and their abuse. 5 hours—Mr. Mooney.

47. **Educational Surveys, a Preliminary Study.** Open to students of Junior College upon permission of the instructor. There are conditions, both good and bad, in every school system which can and should be revealed by a survey, conducted by the administrative authorities in charge of each school system, aided by expert advice from outside the system. The Teachers College is under obligation to furnish this expert assistance. To this end a Survey Committee has been appointed and is ready to render service to any school community in Colorado. The Survey Committee is of the opinion that wherever the Administrative Authorities in any school community wish to undertake a cooperative survey of their schools a preliminary study of the underlying principles of educational and mental measurements together with a study of social problems, especially as these are related to educational problems, should be made by the teachers and those responsible for the work of the Public Schools in that community. This course is intended to give opportunity for such study. It may be given on the individual plan or by a member of the faculty of the College, or by the superintendent of schools in cooperation with the College. The results of the course should be that all who take it will have a fair grasp of the underlying principles of the subjects treated and some should become fairly proficient in giving the tests and making the observations and calculations involved in educational surveys. 5 hours—Mr. Mooney.

#### COURSES PRIMARILY GRADUATE COLLEGE.

17. **Vocational Education.** This course has for its purpose the interpretation of the subject from the artistic, industrial, and commercial standpoints.—Mr. Hadden.

**23. Research in Education.** This course is intended for advanced students capable of doing research in educational problems. Each student may choose the problem of greatest interest to him, provided sufficient opportunity is at hand for original investigation. The results of such research are to be embodied in a thesis. Credit hours will be given in accordance to the amount of work done. A suggestive list of subjects follows: Federal aid to education; state aid to special types of education; vocational guidance; the continuation of the education of the adult; methods of school support; student government; vocational education for women; distribution of school funds; social needs of the child and the adolescent in education; differentiated programs of study for older children in elementary schools; certification of teachers; the Junior High School; the after-training of teachers; measurements of results in education.—Mr. McCracken.

## ELEMENTARY EDUCATION AND TEACHING

GEORGE E. FREELAND, A.M.  
MILDRED DEERING JULIAN, A.B.  
MRS. LELA ALTMAN, Pd.M.  
MRS. BELLA B. SIBLEY, A.B.  
NELLIE MARGARET STATLER, A.B.  
FRIEDA B. ROHR, A.B.  
ELIZABETH HAYS KENDEL, A.B.  
AMY RACHEL FOOTE, A.B.  
JENNY LIND GREEN, A.B.  
BERTHA MARKLEY, Pd.M.

This department aims to give practical courses to teachers in the field, in order to increase their efficiency in teaching. We connect theory with practice. Too often the theory does not seem to be practical because the teacher does not understand how to put her theory into practice. In the following non-resident courses we aim to bring the teacher in contact with our own elementary training and demonstration school as well as with the best elementary school practice in the United States and Europe.

### Courses Primarily Junior College

**1. Methods of Teaching.** (Required of all Junior College Students.) This course takes up scientific methods of teaching the common school branches, the values of and methods for making plans, motivation of school work, assignments that get results as compared with those which do not, developing habits and good methods of study on the part of the children, methods of teaching both slow and quick children in the same class, the function of school subjects in life, etc. 4 hours—Mr. Freeland.

**2. Elementary School Teaching.** (Required of all Junior College Students.) The non-resident work in this course will be made up of reports, under the direction of the department, of different phases of

elementary school teaching. If a teacher in the field cares to work out a portion of the required practice teaching, he should write to the college, stating the problem or subject he cares to teach under supervision of the college, and directions for the work will be forwarded to him. This work may be done in any grade of the public school including the Kindergarten.

SPECIAL NOTICE—Hereafter, the college requirements for practice teaching are to be strictly enforced, and everyone must do some work in teaching in this department before the certificate of graduation will be granted.

**4. The Elementary School Curriculum.** The curriculum is the center of the school and every teacher in the elementary schools should have definite reasons for the subjects she teaches as well as a knowledge of their relative values. It is possible to teach too much of one subject to the detriment of others. Curricula of the most progressive schools in America should be common knowledge among elementary school teachers.

This course will consider the above problems in careful detail. 5 hours—Mr. Freeland.

**5. Primary Methods.** This course will be valuable to both beginning and experienced teachers of primary grades. It will include a resume of methods and material for all subjects, giving the view-point of some of the best authorities. The value of the Montessori system in primary grades will be discussed. The play life of the child, story telling, the study of poems and nature study will receive special consideration. If the student is teaching we shall expect her to try some of these methods and report the result. A daily program and a brief course of study for any one of the primary grades, with reasons for the selection of subjects and arrangement of material, will be required. This should be based on information acquired in this course. 5 hours—Mrs. Altman.

**6. Primary Methods.** This course is based on the needs of the child between the ages of 7 and 8 years. This course leads up to the selection of subject-matter which functions in the child's life. To this end a brief comparison of courses of study in some of our larger city schools is made. The latest and most scientific articles on primary methods are read and discussed. Many devices for teaching beginning reading, phonics, rhythm, spelling, songs, as well as methods for dramatization of stories, multiplication table, and practice in blackboard illustrating are given. 5 hours—Mrs. Sibley.

**7. Third and Fourth Grade Methods.** Junior College Elective. The course is based on the needs of the child between the ages of 8 and 10. It will consist of (1) a review of the most significant things in child study common to children of this period; (2) a comparison of courses of study for these grades; (3) the building of a course of study; (4) methods of presenting the material of the curriculum of the third and fourth grades. 3 hours—Miss Rohr.

**3. Fifth and Sixth Grade Methods.** This course will consider the fundamental needs and characteristics of children in the pre-adolescent period with the purpose of applying such psychological principles as govern method and selection of subject-matter in these grades. Chief emphasis will be placed upon the practical side of the work with a view of arriving at the best means of securing initiative accuracy (good habits of study) and retention. Teachers will be expected to show by reports of actual class work in their own schools how they have been able to apply these principles in order that their conclusions in theory may be tested in practice. 5 hours—Miss Foote.

**9. Grammar Grade Methods.** The pre-adolescent stage is the most critical of all stages of development. Most difficulties of high school pupils have their beginnings in the grammar grades. Grammar grade teachers should know how to avert them. The greater per cent. of boys and girls leaving the eighth grade assume the responsibilities of citizenship without further formal instruction. Grammar grade teachers should therefore know how to make what they teach worth while to their pupils for these essential reasons: 1st, that those who must leave school will be better fitted for living. 2nd, that a greater number will feel that it is good for them to remain longer in school.

This course consists of practical problems which confront every teacher of grammar grade pupils and aims to aid the teacher in overcoming to some extent the difficulties suggested above in the grades in which she may teach.

Some of its specific aims are as follows:

1. To give a knowledge of grammar grade pupils, physically and in terms of their interests; and its application to certain problems of discipline and method.

2. To give understanding of the aims of the various school subjects in upper grades and methods of teaching.

3. To give a working knowledge of what constitutes a good curriculum for grammar grades in certain fundamental subjects, through study of model curricula.

4. To give the ability to adapt specific subject-matter to pupils of these grades. 5 hours—Miss Green.

**10. School Hygiene.** Includes hygienic methods of teaching and hygienic school conditions. Hygienic methods of teaching each elementary subject as well as the demands of the different grades in rooms, light relations, length of periods, etc., are considered. 4 hours—Mr. Freeland.

**11. The Use of Interest in Teaching.** The different phylogenetic, special hereditary, and acquired interests of elementary school children are considered. The growth and changes of interest are noted. Special attention is given to the use of these interests in teaching as well as the dangers of misuse and too much use of them. 4 hours—Mr. Freeland.

**12. Methods of Measuring Progress in the Elementary School.** This course will take up the practicability of the different standards and tests now in use, the grades in which they may be used, and their limits as exact measures of progress. Methods of measuring progress without tests and the formation of new tests will take up a considerable part of the course. The function of this department in the measurement field is to acquaint the teachers with the practical application of measurements and to formulate new measures. 5 hours—Mr. Freeland.

**13. Story Telling in the Grades.** The following subjects will be considered in this course: 1. Why we tell stories. 2. The technique of story telling. 3. Adaptation of stories. 4. Fairy tales and folk tales. 5. Animal stories. 6. Nature stories. 7. Mother stories. 8. Stories of legendary heroes. 9. Stories of historical heroes. 10. Stories adopted from standard literature. 11. Holiday stories. 12. Humorous stories. 13. Ethical stories. 14. Biblical stories. 5 hours—Miss Statler.

**16. Plays and Games for Kindergarten and Primary Children.** A study of the different theories of play, and the psychology of children's play, the development of games, different types of games, the value of play, characteristics of games for children of different ages, original games based upon rhymes and activities, simple rhythms and methods of presentation. 3 hours—Miss Julian.

**22. Play Life of Children as a Basis for Education in the Kindergarten.** The meaning of educational play and its significance in the mental and moral development of the children of the kindergarten and primary grades, the growth of the new conception of play and its influence upon the work in the kindergarten and primary grades. The difference between illustrative and purposive work for children. Means of establishing a closer relation between kindergarten and primary. 3 hours—Miss Julian.

**24. Kindergarten Conference.** A study by each student of some one subject taught in the kindergarten, e. g., stories, games, music or construction. Experimental work with the children. Collection of observations by other teachers. Selection of materials for the children upon the basis of the child's own instincts and interests. The bearing of modern educational theories upon the kindergarten curriculum. 5 hours—Miss Julian.

#### Courses Primarily Senior College

**3. Elementary School Supervision.** This is a course for principals and supervisors. It will be based upon four large factors. (1) Measuring the worth of teachers. (2) The values and relations of elementary school subjects. (3) The use and misuse by teachers of devices, interests, etc. (4) Some results to be expected of teachers in the elementary school. 4 hours—Mr. Freeland.

## COUNTY SCHOOLS

J. H. SHRIBER, Director

This department recognizes that the rural problem is essentially the problem of the rural school. The object of the course offered here is to prepare rural and village teachers for community leadership and to assist in the proper organization and management of the type of school found in the open country.

### Courses Primarily Junior College

**6. County School Methods.** Most of the methods found in books on teaching have been worked out for graded schools, but it is also true that most teachers are destined to begin their professional careers in country schools where conditions are different. The application of methods to a rural school, the organization of material, class room management, and effective presentation will receive special emphasis. This course will aim to discover points of difference between the graded and ungraded school in respect to the utility of pertinent methods used in teaching the various branches of study in a rural and village school. 3 hours.

**25. Administration of Rural and Village Schools.** This course is a study of the history of rural school organization and administration in our country from primitive local needs to the present time. It aims to meet the needs of county superintendents, rural supervisors, and others interested in special problems of country life. It will include studies and special researches in the various phases of reconstruction and enrichment of rural education, and a discussion of forward movements in legislation as they affect the education of rural children. 3 hours.

### Primarily Senior College

**30. Rural Education.** A course intended, primarily, to give a comprehensive grasp of American rural history, and a brief study of the rural educational systems of this and other countries. After the problem is considered in its historical and sociological aspects resulting from a long national evolution, the present as well as the best type of rural school will be studied as a factor in preparing for an efficient citizenship. The fundamental needs in rural education, the recent rural life movement, the redirection of the school, its legitimate functions and revitalizing agencies will be correlated with existing conditions in Colorado and the West and with the social and historical development of the country. 3 hours.

## BIOLOGICAL SCIENCES

LEVERETT ALLEN ADAMS, A.B., A.M., Ph.D.

JOHN C. JOHNSON, A.B., M.S.

**Biology 2.** (Bionomics. Required in the Junior College.) This is required in the first year. It is a study of some of the fundamental facts

and laws of Biology that may be valuable in teaching. It forms a basis for the intelligent study of other educational subjects. It considers the Evolution doctrine, cell life, problems of fertilization, maturation, and embryology, Mendel's Law, formation and organization of tissues. 5 hours—Mr. Johnson.

**Bacteriology 2. Bacteria, Hygiene, Prophylaxis.** A study of (1) bacteria—where found, what they are, how they live and grow; classification of bacteria of economic importance; useful bacteria; special emphasis on parasitic and disease producing bacteria. (2) Hygiene—of person, home and school room. (3) Prophylaxis—how disease is spread; methods of prevention and control; immunity, disinfection, inspection. 5 hours—Mr. Johnson.

## PHYSICAL SCIENCES

FRANCIS LORENZO ABBOTT, B.S., A.M.

CHARLES J. BLOUT, A.B., A.M.

**5. Historical Physics.** (Junior or Senior College.) Probably the historical aspects of the school subjects offer the easiest insight into their relations to human life and problems. Physics, from the modern point of view and practice, is more than a set of laboratory experiences to be memorized. It is a history of *men facing baffling problems* and step by step finding a way to solve them. It is possible that this may be the best point of view from which to teach Physics to any group of students.

This course, however, is planned primarily for those teachers of physics who have a scholarly interest in the evolution of various aspects of their subject. Probably its chief service lies in its bringing together many classical experiments and indicating their influence on the development of physics, which is a matter of considerable difficulty, since there is no book written from this standpoint.

Beyond this, for the sake of humanizing physics, the course exhibits the circumstances and conditions under which various men first performed the classic experiments.

It is our belief that the teaching of high school physics may profit considerably from such a background study. 5 hours—Mr. Abbott.

**7. General Science.** (Junior or Senior College.) One of the main functions of any branch of science is to rationalize life—to free the mind from superstitions of whatever sort, thereby reducing human error and suffering, much of which traces to false beliefs about things and phenomena. Science seeks to accomplish this end by various means—chiefly, however, by teaching a fruitful method of working on problems, or seeking to answer questions. The final result of science for those upon whom it produces the proper effect is a just sense of the KIND and AMOUNT of evidence that should precede the belief in anything.

This is an elementary study planned with the view of giving, as far as possible in such a brief course, an orderly, scientific understanding of

the phenomena of every day environment, thereby increasing mastery of it.

Beyond this, the course should be of immediate use to teachers who must take the county examinations for a certificate to teach. 5 hours—Mr. Abbott.

**8. Radio-Graphic Physics.** (Junior or Senior College.) As man's applications of physics to his problems are continually changing his environment, the teacher of physics finds himself continually under necessity of adding to the traditional matter of the school subject in order to keep relations between school and outside conditions close. The title of this course suggests an extension, the need of which is now widely felt by the progressive element among teachers of physics. (See Abraham Flexner's article in the Atlantic Monthly for July, 1916, page 33.)

This course is intended to give such practical and detailed instruction to those who wish to attempt "WIRELESS WORK" that they may be able to construct, set up, and operate a wireless outfit. The course discusses the function and physics of each piece of apparatus that enters into the outfit, thereby taking the operation of wireless out of the uncertain realm of "cut and try." The valuable practical experience gained by the student while making his outfit (practically all of which he can do) is thus put on a scientific basis, so that he is later saved many blunders as an operator, and knows his material and what it must do well enough to select supplies from a catalog economically and intelligently. The course should be very useful to high school teachers and supervisors of physics. 5 hours—Mr. Abbott.

**10. Household Physics.** (Junior or Senior College.) This is a first, or elementary, course in physics planned wholly from the point of view of the practical BEARINGS of physics. It is not restricted to the household, but uses freely the materials of the immediate surroundings of the home and school. It has been planned to meet the needs of several groups of people: (1) Students and teachers of Domestic Science and Household Economy; (2) Teachers of physics in small high schools; (3) Rural school and grade teachers.

The course deals with matters so fundamental that it should be of large use to the elementary school teacher in explaining many aspects of geography, agriculture, physiology and hygiene.

Beyond this it should be valuable to the house builder. Through those sections that explain the physics of ventilation, heating (water, hot air, steam), vacuum cleaning, etc. It is possible that teachers of physics in the larger high schools might find in this elementary course much practical material useful in stimulating pupils' interest in the subject. 5 hours—Mr. Abbott.

**11. Household Physics.** (Junior or Senior College.) For a general statement giving the purpose of this course read the general statement of course 10.

The subjects treated in this course are electricity, light and sound.  
5 hours—Mr. Abbott.

**12. Theory of the Electron.** (Junior or Senior College.) It is impossible to read or study modern physics without understanding the Electron Theory. The course is a very lucid explanation, in non-technical terms, of the Electron Theory of Matter. 3 hours—Mr. Abbott.

**13. Alternating Currents Simplified.** (Junior or Senior College.) Practically all of the commercial electrical current is an alternating current and our high school text-books give practically nothing of the subject of alternating currents. The aim of this course is to give a student or a teacher of physics such a clear understanding of the action of an ALTERNATING CURRENT as to form a safe and sure foundation for his work. The course is not a mere description of alternating machinery, but an explanation of PRINCIPLES in language so simple and clear that anyone with a very elementary knowledge of physics will have no difficulty in comprehending the course. 5 hours—Mr. Abbott.

### CHEMISTRY

**11. The History of Chemistry.** (Junior or Senior College.) Chemistry as a science is essentially a thing of the present, or rather of the present and the future. As a true science the subject is less than two hundred years old; its real origin is to be sought in the art of alchemy. It was the early alchemist who, by groping in the dark, making many mistakes, following many blind alleys, hindered by the quackery and mysticism of the time, and thwarted by the ignorance and superstition of an untutored populace, handed down to modern chemists the principles and processes of modern chemistry.

It is the purpose of this course to trace the growth of chemistry from its early foundations to the present time, and to review the work and patient research of those who gave the real impulse to chemical study, which led to the discovery of a fascinating and instructive modern science.

At least one year's work in general chemistry is a prerequisite for this course. 5 hours—Mr. Blout.

**12. New Theories of Chemistry.** (Junior or Senior College.) The development of chemistry has taken place by leaps and bounds. There is a marked difference between the chemistry of a quarter of a century ago and that of today. The earlier chemistry was at first purely empirical, then it became more and more systematic and out of this condition has come a most fascinating modern science. The condition which has brought about this change has been the introduction of physical and mathematical methods into this science, and particularly is this true in the application of physical methods in the solution of the real fundamental problems of chemistry.

It is the purpose of this course in chemistry to review the chief new theories of this subject and to show how through the collecting and

coordinating of materials which form the foundation of a science, new substances have been discovered and a knowledge of their composition and properties has been derived. Special attention will be given to the works of Van't Hoff, Arrhenius, and Ostwald, who were the prime leaders in bringing about the transition from a mere system into a real science and who by discovering generalizations and making fertile suggestions and testing their accuracy have directed the trend of chemical work and chemical thought in its development up to the present day.

At least one year's work in general chemistry is a prerequisite for this course. 3 hours—Mr. Blout.

**13. Chemistry as Applied to Problems of Civilization.** (Junior or Senior.) Chemistry is not a subject to be appreciated only by those who have access to some sequestered laboratory, the doors of which are closed to the uninitiated, but is a great modern science which, in countless wonderful ways, is supplying the ordinary needs and contributing to the conveniences of modern life. There are many unexpected and marvelous ways in which chemical forces have been applied to solve the problems of civilization. Today there is more activity in chemical research than at any previous time, and out of what has seemed to be a hopeless confusion of chemical phenomena has come a veritable storehouse of simple and useful discoveries designed for the ultimate service of man.

It is the purpose of this course to see how the chemical forces which are at work all around us have been revealed for the use of man and how, thru trustworthy and painstaking observation even of trifling occurrences, the scientist has contributed to the great romance of modern chemistry.

This course is a popular treatment of the subject, and requires no special knowledge of chemistry. 3 hours—Mr. Blout.

## GEOLOGY AND GEOGRAPHY

GEORGE A. BARKER, M.S.

The courses offered in non-resident work are in phases of the subject where laboratory and field work are not stressed. It is very difficult to do satisfactory work in a subject like mineralogy by non-resident work.

**2. Physical Geography.** A course taking up the land form and climatic sides of the subject. Suggestions as to field and map work are included in this course. A course for students that have not had it in high school. 3 hours.

**3. Climatology.** A course taking up the principal factors controlling the atmosphere, as well as the effect of these in marking out on the earth's surface definite climatic provinces. An elementary course for those who have had little climatic work. 3 hours.

4. **Geography of North America.** A study of the physical geography of North America and the effect of these physiographic conditions upon the commercial and social geography. A course for teachers in service. Presupposes some knowledge of physical geography. 4 hours.

5. **Geography of Europe.** The interaction of environment and race upon the development of the present European Nations. A course for teachers in service. Presupposes a knowledge of North American geography. 5 hours.

7. **Commercial Geography.** A study of products and commercial routes with the relationship to the underlying physiographic controls stressed. An elementary course in commercial geography. 5 hours.

22. **Life Geography.** The distribution of plants and animals emphasizing the main climatic and geologic controls of such distribution. An advanced course based on some knowledge of climatology. 5 hours.

## MATHEMATICS

GEORGE WILLIAM FINLEY, B.S.

Courses in mathematics are especially well suited to non-resident work by reason of their definiteness. The texts used in this work have been selected with special reference to their clearness of statement and logical arrangement of material. Anyone who has had the preparatory work may take up the courses outlined here with ease and profit.

4. **Analytic Geometry.** Practically all of the ordinary notions of Analytic Geometry are covered in this course. The student gains a good working knowledge of the elements of this powerful science, and is, at the same time, prepared to go on into Calculus. 5 hours—Mr. Finley.

5. **Differential Calculus.** This course, and the one that follows are designed for those who feel the need of a broader outlook upon the mathematical field. Needless to say every teacher of high school mathematics needs this work to enable him to understand to some extent the possibilities of the subject he is teaching. In this course the fundamental notion of the Differential Calculus is carefully developed and many practical applications are introduced. 5 hours—Mr. Finley.

6. **Integral Calculus.** The work in this course follows that of the preceding in logical order. It deals with the ordinary notions and applications of the subject. 5 hours—Mr. Finley.

8. **Methods in Arithmetic.** This course takes up the practical, everyday problems of the teaching of arithmetic rather than a more generalized study. It deals with the methods of presenting the various parts of the subject from primary arithmetic to eighth grade work. It is especially helpful to those actually engaged in teaching in the grades, as they are

able to try out the methods suggested and thus make them a part of their permanent capital. 5 hours—Mr. Finley.

This course may also be taken as a group course.

**9. Methods in Secondary Mathematics.** This work is planned for active or prospective teachers of high school mathematics. It takes up a careful study of the purpose and value of secondary mathematics and of the most recent movements in that field. It also includes a study of the fundamental principles of elementary algebra with a view to giving the teacher a clear understanding of the reasons involved in the various processes. 5 hours—Mr. Finley.

**11. Descriptive Geometry.** This course takes up the ordinary problems in points, lines, planes, and solids. It is designed especially for those interested in manual training. 3 hours—Mr. Finley.

**1a. Solid Geometry.** This course is designed to meet the needs of that large group of students who completed their plane geometry in high school but did not take up solid geometry. A careful study of the main propositions and the solution of many of the originals is required. 5 hours—Mr. Finley.

**1. College Algebra.** Anyone who has had at least one year of elementary algebra should be able to carry this work with ease. It takes up first a rapid review, with special attention given to the principles involved and continues with a study of functions and their graphs, quadratic equations, inequalities, and complex numbers. 5 hours—Mr. Finley.

**2. College Algebra.** A continuation of course 1. Deals with theory of equations, permutations, combinations, probabilities, determinants, partial fractions, logarithms, and infinite series. 5 hours—Mr. Finley.

**3. Trigonometry.** Anyone who has had at least one year of elementary algebra and a course in plane geometry is prepared to take up trigonometry. The course covers the solution of the right triangle, the development of general formulas, and the solution of the oblique triangle. Many problems of a practical nature are included in the work. 5 hours—Mr. Finley.

## SOCIAL SCIENCE

GURDON RANSOM MILLER, PH.D.

EDGAR DUNNINGTON RANDOLPH, A.M.

This department offers a series of courses which it desires shall appeal to both the needs and ambitions of many students. The courses are liberal and varied in scope. Many of them will meet the immediate practical needs of teachers. Some of them are technical, and are intended for teachers and students of special subjects. Still others are advanced courses in social theory, or are practical studies in applied sociology. Superintendents and

principals will find many courses in this list well adapted for group study and teachers' clubs.

The department of Social Science invites correspondence regarding these courses. We will formulate new courses, or change present courses when such action seems desirable. Let us know what you want.

**1. The Beginnings of Human Society.** (Junior and Senior College.) An interesting study of early human society. Valuable for teachers in descriptions of physical, mental, and social changes in primitive men and women. A story of development through race experience; the evolution of language, industry, art, the family, law, and other social institutes; correlates well with courses in genetic psychology, human biology, human geography; and is also commended to students of history as a basal study. 4 hours—Dr. Miller.

**2. Social Evolution.** (Junior and Senior College.) A more advanced course in human evolution. The first volume is Eliot's intensely interesting account of the origins of human beings, and the original peopling of the continent of Europe. The second volume is Lord Avebury's standard work on "Primitive Times;" and the final volume, by Dr. Boaz of Columbia, takes as its thesis the idea that all races are approximately equal in potentiality.

This course correlates well with studies in the psychology of primitive people, race studies, and with many phases of the physical geography of Europe. 5 hours—Dr. Miller.

**3. Modern Social Problems in Relation to Education** (Junior College). This is a first course in sociology. It is planned to meet practical needs of a somewhat varied group of people. It should be distinctly useful to the teacher who wishes to vivify her teaching of history by a clearer point of view and a more incisive method of work. It should be valuable to the supervisor of elementary school subjects who wishes a livelier sense of the relationship of school to life—as shown in a social interpretation of the course of study. To the student of affairs it offers help in forming judicious attitudes toward various problematic situations, such as the dynamic modern citizen is required to pass judgment on. To some extent the course will be varied to meet these different needs—where they cannot better be met by other courses described in this bulletin. Primarily, however, this is a course for elementary school teachers in the relations of school work to the varied problems of the world outside school. It is largely concrete. Of the five books studied, only one deals with social theory. This, the first one, is accompanied by very full directions for study—which will be extended as far as the needs of the student require and the ability of the instructor admits. 4 hours—Mr. Randolph.

**4. Elementary Sociology.** (Primarily Senior College, but open to qualified Juniors.) This is a course planned to give a clear working notion of the *field of thought* more or less vaguely called *sociology*. It presents the accepted results of study in the field and offers a perspective

of the whole field with the various subdivisions displayed in proper relations. In other words, the relationships of the somewhat tangled mass of "modern social problems" is made clear and the most judicial opinions in regard to them are exhibited. This course should be of considerable value to teachers of history and civics. And the general reader who is interested in the complex inter-relations of modern life may find this course offering somewhat nearly the orientation he wants. 5 hours—Mr. Randolph.

**5. Elementary Sociology.** (Primarily Senior College.) This course is less concrete than the preceding one. It does not attempt to give an outline of the whole field of Sociology, but is concerned rather with the study of social theory in an elementary way. The foundations that have been most influential in America will be considered carefully. This course should follow Sociology 4. 4 hours—Mr. Randolph.

**6. Social Theory.** (Senior and Graduate Colleges.) An advanced course in the principles of sociology, based on the works of Ward and Giddings, both of whom are recognized great creative leaders in Sociologic thought. This course is virtually a study in social philosophy, and is commended to mature advanced students only. 5 hours—Dr. Miller.

**7. Social Theory.** (Senior and Graduate Colleges.) More varied in material than course six. All books in this course are scholarly and scientific products of two of the greatest living American Sociologists, and one English author of world fame. This will form a productive study of large value for advanced students. 4 hours—Dr. Miller.

**8. Social Direction.** (Senior College and Graduate.) A course in applied sociology, social control, and the scientific direction of comprehensive social reform efforts. This study presupposes knowledge on the student's part, of social theory, social institutions, and modern political attempts to direct social change without revolution.

A vigorous, vital course for experienced students. 5 hours—Dr. Miller.

**9. Comparative Sociology.** (Senior College and Graduate.) For students who have had Sociology 4 or Sociology 6, this course offers an opportunity to consider somewhat deliberately the factors in the rise of Sociology, the nature of the theoretic and practical problems confronted by the sociologist, the various points of divergence of theory among the more significant contributors to the science, and the like. It offers in the end the best attempts at a synthesis of the whole field of social thought. 5 hours—Mr. Randolph.

**10. Social Psychology.** (Senior College.) This course might better be called a course in *psychological sociology*, if the older name had not become fixed. It deals with those parts of psychology upon which *social* theory immediately rests. It uses psychology for the purposes of social analysis. In other words it is a basic course in social theory. It considers, for example, the part played by instinct, feeling, intellect,

imitation, sympathy, and the like in the characterization of society. The course should be useful to students of education and to administrators who are not satisfied with their merely empirical control of social groups. 5 hours—Mr. Randolph.

**11. The Evolution of Morals.** (Senior College and Graduate.) A scientific study of the development of morals through anthropologic and historic times. Of interest, not only to teachers, but to all students of ethical and religious development. This course might wisely be preceded by courses one or two; and will be permitted to Junior College students who have taken either of these courses, or similar ones, or who have taken two courses in elementary sociology or social theory, or who have earned not less than seven hours in such courses. 5 hours—Dr. Miller.

**12. Social Readjustment.** (Junior College.) This course offers an elementary study of how the processes of reconstruction may be applied to a considerable number of practical social problems. It is a much *simpler* course than Sociology 4, as well as much less *extensive* study. It isolates certain situations from the larger field and by a brief analysis of the factors in these attempts to stimulate the habit of thinking in terms of social cause and effect. Its main concern is with the possible lines of improvement to be realized through supplementing and redirecting the development of such fundamental institutions and relationships as Family, Church, School, Property and the like. This course should be useful to the elementary school teacher of history and civics. 4 hours—Mr. Randolph.

**13. Scientific Management and Labor.** (Senior College and Graduate.) A somewhat technical course, dealing with detailed study of mechanical operations, and the efficiency of labor. It includes consideration of the relation of psychology and industry; factory management; fatigue surveys; the bonus system, and its effects on production, and also on workmen. The authorities studied are Taylor, Hoxie, Gantt, Münsterburg, and others.

Intended for teachers of industrial classes, commercial and business classes; but is also of large interest to all students of efficiency in industry. It is a superior practical course. 5 hours—Dr. Miller.

**14. Privilege and Society.** (Junior and Senior College.) This study is closely allied with course twelve, and may profitably either precede or follow it. It deals with the social problems arising from special privileges; social abuses and their political aspects; and with tendencies toward reform in the social order.

An interesting course. 4 hours—Dr. Miller.

**15. Social Insurance.** (Junior and Senior College.) Studies the operation of social insurance in European countries, Australia, and New Zealand, and the growth of the idea in America since 1912. It comprises a study of social compensation for accidents, sickness, invalidity, unem-

ployment, and old age. A comprehensive and instructive course. 5 hours—Dr. Miller.

**16. Society and The Church.** (Junior and Senior College.) A live stimulating course of large interest to students of Church, Sunday School, and religious social improvement; of special value to classes in religious education. The authors in this course are Rauschenbusch, King, Wormer, and Cutting, all well known writers in this department of social thought. 5 hours—Dr. Miller.

**17. Society and Religion.** (Junior and Senior College.) Similar to course sixteen, but dealing more directly with growth and changes within the church. It comprises discussions of the social basis of religion, the relation of the Church to democracy, religion in social action, God in evolution, and the religion of the future. 5 hours—Dr. Miller.

**18. Rural Sociology.** (Junior and Senior College.) A constructive study of country life, economic activities, social organizations, schools, clubs, churches, social centers, and modern efforts and successes in rural progress; intended primarily for rural teachers, but is of value to all students of rural social conditions and needs. 5 hours—Dr. Miller.

**19. Property and Society.** (Junior and Senior College.) An attractive study of property rights, wealth holding, standards of living, social problems resulting from poverty, and theories of the leisure classes. 4 hours—Dr. Miller.

**20. Distribution of Wealth.** (Senior College.) A companion study to course 19, but more extensive, and more scientifically worked out. It contains Hobson's well known contrast between production of wealth and its consumption, in which he treats consumption as the neglected element in economics and urges its just scientific treatment. It also contains Dr. Ely's latest discussion of property and contract. 5 hours—Dr. Miller.

**21. Problems and Methods of Modern Philanthropy.** (Senior College and Graduate College.) This is a course planned to reveal to students of affairs, teachers of history and civics, and those who, from the cultural point of view, are interested in the dramatic under-currents of human life and progress, the least known aspects of our civilization—those aspects which perhaps are to have most credit in the end if we succeed in passing from civilization to humanization. The course will deal with (1) the nature and extent of social failure; (2) the slow and bungling evolution of ways of relieving distress or of putting down the symptoms of misery; (3) the gradual achieving of a conscious technic and curative methods of relief; (4) and the general principles which experience has slowly contributed to present methods of working in social amelioration. Happily, there is a considerable number of books available for such a course, which possess merits of form and graces of expression entitling them to be called

*literary* at the same time that they exemplify all the conditions and courageous virtues of a thoro-going scientific method. 5 hours—Mr. Randolph.

**22. Women and Social Evolution.** (Junior and Senior College.) A reliable, attractive, sociological study of the modern feminist movement. The contributions are from German, Swedish, and American writers, and include the biologic and psychologic aspects of the problem, as well as its historical and sociological features.

Worthy the attention of any student. It is closely related to courses 31 and 32. 4 hours—Dr. Miller.

**23. Immigration and American Problems.** (Primarily Senior College and Graduate, but open to qualified Juniors.) This course is intended to be of practical benefit to two groups of people: (1) To teachers—especially teachers of history and civics—it offers the sociologists' and the economists' interpretative principles in the treatment of a social phenomenon which, tho it has been the life of America, is hardly considered in the usual school history. (2) To those interested in forming judicious views upon current problems of our life it offers as far as possible in the limits of such a course an impartial account of the great *change in the character for population* in the 19th century, whereby from a people comparatively homogeneous we have come to exhibit in our composition the greatest mechanical mixture of racial stocks the world has ever known, and have suffered consequent weaknesses in our institutions. It is felt that the course is timely now in view of the recent recognition by the government of the peril implicit in our unassimilated aliens. 5 hours—Mr. Randolph.

**24. Problems and Methods of Child Welfare.** (Senior College and Graduate, but open to qualified Juniors.) This is a course in the growth and tendencies of the modern movement for the conservation of children. It begins by giving a view of the status of children in the past; passes to a consideration of the evolution of the child protection agencies in the United States; and deals finally with the present problems and tendencies in child welfare programs. This is a course which should be especially useful to parents who are desirous of raising the type of family relations in their community either thru organizations intended to affect the community by public effort or thru less direct agencies. Beyond this, parents who are especially zealous to give the most humane nurture to their children will find in this course much to recommend it to them. It should be useful to teachers of Household Arts as an extension of the dynamics of home making. It is, however, hoped that this course will appeal largely to the elementary school teacher, who, next to the parents, best loves the child and most needs to know of the significance of changing attitudes to the child. 5 hours—Mr. Randolph.

**25-26. Socialism.** (Senior and Graduate College.) The first of these courses is an introductory study of the scope and meanings of this modern reaction to modern conditions of life. It will probably meet the needs of

most students. It gives a complete but elementary survey of the whole field, and thru some of the simpler treatises presents the pros and cons concretely enough to make the course enjoyable to the novice. In the second course more is done to show the variations of socialism under varied national conditions. 5 hours each—Mr. Randolph.

**27. Social Legislation.** (Senior and Graduate College.) The term social legislation is intended to suggest a very recent development of purpose in legislative remedies. If it be true that in the past legislation has not only not anticipated bad conditions but has, rather, characteristically waited until evils reached dramatic proportions before being applied, the meaning of the course title will be perfectly clear. The course is to deal with the more purposive application of legislative remedies to existing social maladjustments—such as, for example, labor difficulties, housing and health problems, the liquor traffic, prostitution, city planning, and the like. 5 hours—Mr. Randolph.

**28. Boys and Modern Social Problems.** (Junior and Senior College.) This course is in sequence with Sociology 24 and offers those who have been especially interested in the field of child conservation an opportunity to give special attention to the problems of rearing, managing, and directing the more restless sex. 4 hours—Mr. Randolph.

**29. Crime and Society.** (Junior and Senior College.) This course is a study of the relationship of the criminal to society—to social institutions and social organizations. Incidentally it will show the changing attitude of society toward the criminal, and the more important factors behind the change. The course is, however, mainly concerned with the present relations of the criminal in society and his treatment at the hands of society. The course intends to present the best modern thought in the various aspects of this field. 4 hours—Mr. Randolph.

**30. The Single Tax.** (Junior and Senior College.) A discreet, careful discussion of the Single Tax, in pleasing form, and all material up to date. No old books in the course. Taxation reform is one of our most comprehensive social changes, and is probably the gateway to accomplishment of most of the general program for social improvement, thru a more equitable distribution of wealth. This course discusses the Single Tax as a possible solution of the general problem. 4 hours—Dr. Miller.

**31. The Modern City.** (Junior and Senior College.) A live topic, discussed by the most virile and attractive writer on this subject in America. The three volumes in this course are all by the same writer, an American scholar, of wide and varied experience, occupying high government position. The series is in sequential order, and uses the comparative method in discussing British, German, and American cities. It is a rich fund of information. 3 hours—Dr. Miller.

**32. The Family.** (Junior and Senior College.) A very profitable study of the family from the standpoint of education, industry, ethics, and

as a social unit. Desirable for teachers, but of great value to all students of either theoretical or practical Sociology. Closely related to courses 22 and 24. 5 hours—Dr. Miller.

33. **Social Hygiene.** (Junior and Senior College.) A special study of marriage and sex, not highly technical, by writers of national and international reputation; a thoroly reliable, scientific study. 4 hours—Dr. Miller.

34. **Heredity and Progress.** (Junior and Senior College.) Presenting two books each, on the biologic and sociologic aspects of the problem of social progress. Can be profitably used in connection with courses 8, 11, 36, or 39. 4 hours—Dr. Miller.

35. **The Evolution of Culture.** (Senior College and Graduate.) A standard scientific study of the development of human knowledge, and the bases of civilizations. The material is largely anthropological, and forms an excellent sequence for courses 1, 2, or 11. Commended to historical students. 5 hours—Dr. Miller.

36. **Social Progress.** (Senior College and Graduate.) Deals with modern social evolution and theories of progress; historical and philosophical in method of treatment; covers a wide range of thought, and might properly be termed a philosophy of history. 4 hours—Dr. Miller.

37. **Labor and Society.** (Junior and Senior College.) A study of the laboring classes, development, place, privileges, and rights in society; and relation of workers to systems of industrial administration. Specially commended to teachers of industrial education, and students of economics. It correlates well with courses 12, 13, 14, 15, 19, and 27. 4 hours—Dr. Miller.

38. **German Social Organization.** (Junior and Senior College.) Four recent books of superior quality on the modern German method and system of organization in industry, business, commerce, education, and governmental activities. A rich fund of information, well told. 4 hours—Dr. Miller.

39. **Social Philosophy.** (Senior College and Graduate.) An advanced course in fundamental social theory, closely related to courses 6, 7, 8, 9, 10 and 36. Commended to mature, experienced undergraduates, and to graduate students. 5 hours—Dr. Miller.

## HISTORY AND POLITICAL SCIENCE

EDWIN B. SMITH, A.M.

The work offered in this department includes some of the regular resident courses and some special courses which may be done to better advantage. Other work beside that listed may be arranged to meet the needs of students.

The department is prepared to organize group courses to be in charge of an instructor from the College. Some of this work is indicated in the courses listed; other work may be arranged on application.

Special lectures, a single lecture, or courses of lectures may be arranged on subjects of present interest, such as The Background of the European War, The Diplomacy Leading to the War, International Relations, The United States in Relation to the War, Our Commercial Policies, and Relations with Spanish America.

**1. American History (1492-1829).** European conditions leading to the discovery of America; the colonies established by Europeans; colonial institutions; the struggle for supremacy in North America; the American Revolution; the Confederation and the Constitution; organization of the national government; the Federalist party; Democratic opposition; Jefferson's policies; difficulties of neutrality; War of 1812; reorganization after the war; westward expansion; the Monroe Doctrine. 5 hours.

**2. American History (1830-1917).** A continuation of course 1. Jacksonian democracy; sectional strife; the issue of slavery; Texas and the Mexican War; the Republican party; secession of the southern states; the Civil War and reconstruction; political and financial readjustment; civil service and economic reform; industrial combinations; the silver movement; the new American diplomacy; war with Spain; imperialism; Roosevelt policies; the Wilson administration. 5 hours.

**5. European History.** The countries of Europe at the beginning of the sixteenth century; the commercial revolution; the Protestant Revolt and the Catholic Reformation; the culture of the sixteenth century; absolutism in France; parliamentary government in England; the world conflict of France and Great Britain; the revolution within the British Empire; eighteenth century Germany; the rise of Russia; "Liberty, Equality, Fraternity;" European society in the eighteenth century; the era of Napoleon. 5 hours.

**6. European History.** A continuation of course 5. The era of Metternich; the Industrial Revolution; reform and revolution; the growth of nationalism; the problem of the Irish; the German Empire; the new Russia; dismemberment of Turkish Empire; the spread of European civilization in Asia and Africa; international relations and the outbreak of war, 1914. 5 hours.

**7. English History.** The foundations of England; consolidation of England under Norman supremacy; parliamentary development; medieval institutions; civil wars and the decline of feudalism; the Tudor period; divine rights; monarchy and Puritanism; contest for constitutional government; Whig supremacy; the age of Walpole; development of Greater Britain; transition to modern England; democracy and reform; the Eastern Question; present movements. 5 hours.

**9. National Government.** The relations between the government of the United States and the people; the new conception of the presidency; the growing powers of Congress; the Federal Judiciary; constitutional protection of business; the police powers of the national government; civil service; direct legislation; corrupt practices act; legislation of the last administrations. 5 hours.

**10. Industrial History of the United States.** Industrial conditions of Europe affecting the early history of the United States; industrial England; colonial industry; economic and industrial aspects of the Revolution; the industrial revolution in the United States; the westward movement; slavery; recent industrial conditions; the development of agriculture, manufactures, and the growth of trusts and trade unions. 5 hours.

**11. Commercial History of the United States.** A survey of commerce from early times; colonial commerce and its consequences to European nations; commerce in the several periods of American development, domestic and foreign; the coastwise trade; government aid; the consular service; improvement of rivers, harbors and waterways; tariff provisions affecting shipping; commercial treaties; commercial changes of the twentieth century; international complications. 5 hours.

**13. The Teaching of History and Civics.** The development of history instruction in schools; history and civics as taught in schools today; methods of study, presentation, and material, considered in connection with present conditions; general purposes and aims; place of history and civics in the curriculum; use of the text book; assigning the lessons; use of source material; collateral reading; map work; the recitation; devices for arousing interest. 5 hours.

**19. Constitutional History of the United States.** Origin of the constitution; relation to the state constitutions; the Articles of Confederation as a precedent; the constitution in the process of making; the interpretation placed on the principles by the makers; the period of misunderstanding; the Civil War; the new interpretation of the principles of government; the service of the law courts. Throughout the course the great cases that have grown out of the interpretations of the document will receive consideration. 3 hours.

**21. Political Parties and Party Government.** The rise and growth of political parties in the United States; the first political cleavage; the Jacksonian democracy; the Whig party; the conflict over slavery and the Republican party; Republican supremacy; the reorganization of the Democratic party; place of third parties in American politics; party machinery in the United States; the national convention; the national campaign; state and local party machinery; popular control of political parties. 3 hours.

**22. Municipal Government.** The growth of cities; their relation to trade and industry; state control over cities; the development of the

American city; services to the people; city planning; the commission form of government; the city manager; other recent movements. 3 hours.

**23. International Relations.** A study of the rules of civilized nations in their relations with each other; the history and development of international law; its divisions of peace, war, and neutrality; "intervention;" rights and duties in connection with property; the jurisdiction of a nation over its territory, subjects, and public and private vessels; the rights and duties of diplomacy; modes of warfare; belligerency; treaties; rights and duties of neutrals; blockade; contraband of war, etc. 3 hours.

**24. Modern European Governments.** A course presenting conditions of European governments; the foundations of their governments; the positions of the heads of governments; democracy under the present governments; most recent movements. 5 hours.

## LATIN AND MYTHOLOGY

JAMES H. HAYS, A.B., A.M.

This department offers five courses adapted to students of either Junior or Senior College. These courses are as follows:

### LATIN

**1. Beginning Latin.** (Junior and Senior College.) Text D'Ooge's Latin for Beginners. 5 hours.

**2. Intermediate Latin.** (Junior and Senior College.) This course can be taken by those having had from one to two years' work of the subject. Texts: Sallust's Catiline and any good grammar. 5 hours.

**3. Pedagogy of Latin.** (Junior and Senior College.)

a. How to Read Latin.

Text: The Art of Reading Latin.—William Gardner Hale.

b. Teaching Latin Prose.

c. Exercises in Translation and Prose Composition, assigned to each student. 5 hours.

### MYTHOLOGY

**1. Mythology of Greece and Rome.** (Junior and Senior College.) Text: Myths of Greece and Rome. Gayley. 5 hours.

**2. Mythology of Norse and Germanic Peoples.** (Junior and Senior College.) Text: Myths of North Lands. Guerber. 5 hours.

## LITERATURE AND ENGLISH

ALLEN CROSS, A.B., Ph.M.

ADDISON LEROY PHILLIPS, A.B.

The department of literature and English selects from all the courses which it offers in residence, a group that may profitably be conducted by individual correspondence.

**Survey Courses in Literature.** The three following courses correspond to English 8, 9, and 10 of resident work. The readings from selected authors cover a period approximating twelve centuries. The student reads the masterpieces for a period, or, in some instances it may be only a portion of the masterpiece that can be regarded as a unit; along with the study of the author, he reads as much of the criticism and literary history of the period as his time and inclination permit. Then he writes a report of his readings, following the directions and suggestions on the lesson sheets. The lessons provide questions, topics for investigation, bibliographies and brief outlines for themes. Emphasis is placed upon first-hand knowledge of the author's work, rather than on history and biography.

**8. English Literature (670-1660).** Open to students of either junior or senior college. The course will consist of a study of the following pieces and authors:

1. Beowulf and Anglo-Saxon literature. 2. Chaucer. 3. Everyman. 4. Book I of The Faerie Queene. 5. The English Sonnet. 6. Sidney's Arcadia (extract) and other attempts at fiction. 7. Marlowe's Dr. Faustus. 8. Macbeth. 9. Every Man in His Humour or Epicene (choice). 10. Bacon (12 essays). 11. Early Translations of the Bible (extracts). 12-14. Burton, Walton, and Sir Thomas Browne. 15. Pilgrim's Progress, Book I Paradise Lost and Lycidas. 5 hours—Mr. Phillips.

**9. English Literature from 1660-1900.** Open to students of either junior or senior college. This course includes studies in (a) the poetry of Dryden, Pope, Thomson, Gray, Goldsmith, Cowper, Burns, Wordsworth, Coleridge, Scott, Byron, and Tennyson; and (b) the prose of Dryden, Pepys, Addison, Steele, Johnson, De Foe, Swift, Goldsmith, Lamb, De Quincey, Macaulay, and Ruskin; and (c) plays by Goldsmith and Sheridan. 5 hours—Mr. Phillips.

**10. American Literature (1700-1900).** Open to students of either junior or senior college. This course embraces (a) a survey of the history of colonial literature, and (b) a careful study of the following authors: Emerson, Whittier, Longfellow, Holmes, Lowell, Hawthorne, Poe, and Whitman, with a few others of lesser note.

**2. Advanced Composition.** This is a practice course in writing designed for those who are already familiar with the elements of correct expression in writing. It consists of fifteen themes of 6 to 10 pages each,

on paper approximately 8 by 11 inches. Detailed directions for each of the fifteen papers are given in the syllabus, which will be sent, one section for each theme, after the student has enrolled for the course. The papers are read, criticised, and returned by the instructor. 5 hours—Mr. Phillips.

**15. Modern Dramatists.** In addition to making a careful study of standard treatises on modern drama, the student will be expected to read and analyze for form and meaning twenty representative plays, Continental, English, and American, since Ibsen. Details furnished in a syllabus. 5 hours—Mr. Cross.

**16. The English Novel.** In the main this is a reading course following the development of the English novel from 1740 to 1900. The two text books which will be indicated are assigned for reading to guide the student through the course in an ordered way. Ten novels are read entire, and parts of two others. The details of the work are furnished in a syllabus of fifteen parts. 5 hours—Mr. Cross.

**16a. The Recent Novel.** Many students who do not care to follow the development of the novel as a literary form wish to study the novel of the present. An opportunity for such study is given in this course. It may be taken following course 16 or independently. In the main, it consists of a careful study of ten or twelve novels of the present, with written work to accompany each study. Some of the most significant pieces of writing on social and educational problems of the day is being published in the form of novels. This course gives literary students an opportunity to study these problems. 5 hours—Mr. Cross.

**17. The Short Story.** The study of the forms and themes used by modern short story writers. To-day the short story is a literary form quite distinct from any other, and capable of carrying a significant theme within its limited space. This course attempts first to study the forms and then to show how the story is being used to entertain and to teach truth to the millions who read magazine fiction. The student is expected to study the structure and meaning of fifty typical stories. 5 hours—Mr. Cross.

**19. Selected Plays of Shakespeare.** A careful study of the ten plays of Shakespeare, chronicle, comedy, and tragedy, which seem best suited to high school courses in English Literature. 5 hours—Mr. Cross.

#### Group Courses

The head of the department of literature and English is prepared to conduct group courses, in centers which can be conveniently reached, in the following subjects:

**15. The Modern Drama.**

**16. The Development of the English Novel.**

**16a. The Recent Novel.**

**17. The Short Story.****19. Selected Plays of Shakespeare.****1a. The Functional Teaching of English Grammar.**

In each case fifteen lectures are given, and assignments made for work between lectures. Each course carries five hours college credit.

## READING AND LITERARY INTERPRETATION

FRANCES TOBEY, A.B.

The following courses, offered by correspondence, may be supplemented by individual courses involving research and original work suited to the needs of the individual student. Correspondence concerning the definition of such problems is invited.

• COURSES PRIMARILY JUNIOR COLLEGE

**2. Reading in the Grades.** Aims of the course: To stimulate insight and encourage system in the organization of material; to direct the study of method; to develop initiative and resource in the conduct of the reading class; to quicken the teacher's perception of the values of literature of varied types, for pupils of various grades. 5 hours.

PRIMARILY SENIOR COLLEGE

**15. The Festival.** Aims and Scope of the course: A study of the values, the varied forms, and the practical development and direction of school pageants and festivals; the preparation of full outlines of school or community festivals which are detailed and practicable for actual use in schools. 5 hours.

## ROMANCE LANGUAGES AND GERMAN

EDWIN STANTON DU PONCET, Ph.D.

By a recent arrangement, the department of modern foreign languages is able to offer correspondence courses by the phonograph method. Four different methods may be had, as follows:

First: A year's course using the ordinary course of instruction with the aid of a standard phonograph, grammar, and letter writer included in the course. The price for the course complete, including 30 phonograph records and complete text-books, is \$50.00. Second: Without the phonograph, the same course with all complete, for \$35.00. Third: A similar course with the Vanophone and 30 records, for \$30.00. Fourth: The same course with the dictaphone, the machine and records to be returned at the end of the year, for \$32.00. All express charges on the above material will be paid by the College.

The following are the non-resident courses offered without any reference to the above aids in pronunciation. The tuition fee for each term's work is \$5.00.

## FRENCH

### First Year Courses

**1. Elementary French.** The definite and indefinite articles; use of the articles; the partitive article; remarks on the articles. The two auxiliaries; uses of same. Number and gender. The adjectives; irregularities of the same; comparison of adjectives. The present tense; the imperfect tense; the future and future perfect, the pronouns *qui*, *que* and *quoi*. Relative and interrogative pronouns. The reading of fifty pages of selected easy texts. The review of all work up to this point. 5 hours.

NOTE.—Unless special reasons are given, no credit will be given for less than 15 hours in the first year of any language studied in this manner.

**2. Elementary French.** Possessive adjectives and pronouns. The demonstrative and conjunctive pronouns. Use of the pronoun *ce*. Disjunctive personal pronouns. Conjunctive pronouns; position of same; use of disjunctive instead of conjunctive. Negation. Indefinite adjective and pronouns. Use of *tout* and *même*. Positions of adverbs. Peculiarities of spelling. Idiomatic use of *avoir* and certain nouns. The reading of one hundred pages of graded French texts. 5 hours.

**3. Elementary French.** The use of the imperfect tense; past definite and past indefinite tenses; the pluperfect and past anterior; use of the future and conditional tenses. Rules of the past participles. Use of the auxiliary *avoir*. The rule for *être*. Use of reflexive pronouns. Use of the imperative. Use of the present participle. The impersonal verbs. The verbs *must*, *should*, and *ought*. The verb *pouvoir*. The use of the subjunctive after verbal expressions; use of the subjunctive after certain conjunctions; remarks on *que* and the subjunctive; distinction between the subjunctive and other moods; uses of the tenses in the subjunctive. General rules of negation; use of *ne*. Inversions. Gender of nouns and rules for same. Uses of prepositions before certain infinitives. A comprehensive study of irregular verbs. The reading of 150 pages of easy French plays. A colloquial study of every day idioms. 5 hours.

### Second Year Courses

**4. Intermediate French.** Reading and study of *George Sand's Mare au Diable* and *Dumas' Monte Cristo*. French composition. 5 hours.

**5. Intermediate French.** Intermediate Course. Reading and study of Verne's *Michael Strogoff* and *Le Tour du Monde en 80 Jours*. Review of grammar and composition. 5 hours.

**6. Intermediate French.** Intermediate Course. The study of selected works by Erckmann-Chatrian: *Le Juif Polonais*, *Waterloo*, and *Madame Therèse*. Advanced press composition. 5 hours.

**15, 16, 17. Advanced French.** Advanced Courses. See the general catalog for these courses. Offered only to students who have previously done work in residence. 5 hours for each course.

## GERMAN

### First Year Courses

**1. Elementary German.** Introduction and pronunciation. Cases, nominative and accusative. The indefinite article. Present indicative. Definite article. The imperative mood. Genitive case. The present tenses. The dative. Word order. Personal pronouns. Reflexive pronouns. Future indicative. Personal pronouns reviewed. Non-personal use of personal pronouns. Strong nouns, first class. The present tense of the modal auxiliaries. Strong nouns of the second class. Strong nouns of the third class. The present tense of *wissen*. Weak nouns. Past tenses of weak verbs. Past tenses of the modals and of strong verbs. The reading of 50 pages of easy German stories. 5 hours.

**2. Elementary German.** Possessive pronouns and the past tenses of strong verbs. Prepositions with the dative and accusative. Weak declension of adjectives. Adjectives used as substantives. The past tense of semi-irregular verbs. Relative pronouns. Perfect tense of weak verbs. Declension of adjectives after *ein* words and after *der* words. Pluperfect and future of weak verbs. Strong declension of adjectives and a review of the mixed and the weak declension of adjectives. Reading of 50 pages of graded texts. 5 hours.

**3. Elementary German.** Perfect and pluperfect of modal auxiliaries. Demonstratives. Cardinal numbers. Ordinal numbers. Interrogatives. Comparison of adjectives and adverbs. Inseparable and separable prefixes. Separable and inseparable verbs. *Sein, haben,* and *werden* used as auxiliaries. Passive voice. Subjunctive. Indirect statement. Conditional mood. Conjunctions. Study of strong verbs. The indirect discourse. Rule of gender for nouns. Reading of 100 pages of intermediate German. 5 hours.

### Second Year Courses

**4. Intermediate German.** Reading of *Gerstäcker's Irrfahrten; Heyse's Anfang und Ende; Wildenbruch's Das Edle Blut; Wichert's Die Verlorene Tochter.* 5 hours.

**5. Intermediate German.** Study of *Storm's Immensee, Karsten Kurator and Polepoppenspäler; Harris' Prose Composition.* 5 hours.

**6. Intermediate German.** *Schiller's Wilhelm Tell, Maria Stuart, and Jungfrau von Orleans.* The life and works of Schiller. 5 hours.

**4b, 5b, and 6b. Commercial German.** A course of one year's work in the writing and reading of commercial German. This course presupposes at least one year of German. The writing of advertisements;

the study of phrases used in business houses; the language of the court room; technical terms. 5 hours for each course.

### Advanced German

(For students who have done resident work at this institution.)

**12. Advanced German.** *Schiller's Trilogy, Wallenstein's Tod, Die Lager, und Die Picciolomoni.* Advanced composition. 5 hours.

**13. Advanced German.** *Lessing's Minna von Barnhelm, Emilia Galotti, and Nathan der Weise.* Study of Lessing's life and works. Some attention paid to the *Hamburg Dramaturgy*. 5 hours.

**15. Advanced German.** Devoted to Goethe, *Hermann und Dorothea, Der Vicar von Sesenheim*, and one other selected work. 5 hours.

**18, 19, 20, Advanced German.** The following courses are open to all who may be able to take the work. *The Present German Drama.* Reading the selected plays of *Fulda, Sudermann, and Hauptmann.* Three plays of each will be read. 5 hours for each course.

### SPANISH

#### First Year Courses

**1. Elementary Spanish.** The articles. Gender of nouns; possession; plural of nouns. Regular verbs, present of the indicative. Interrogative sentences. Personal *a. Usted: ustedes.* Forms of address. Qualifying adjectives. Apocopation. Comparison of adjectives; of adverbs. Participles. Uses of *haber* and *tener.* Present and perfect tenses. Uses of *ser* and *estar.* Reading of 75 pages of easy texts. 5 hours.

**2. Elementary Spanish.** Radical change of verbs of the first class. Cardinal numbers. Ordinal numbers. Time of day. Augmentatives and diminutives. The past participle and the past absolute. Personal object with *a.* Possessive adjectives. Future and conditional. Demonstrative, pronouns and adjectives. Object personal pronouns. Reflexive and reciprocal verbs. Passive voice. Two object personal pronouns. Compound tenses of the indicative and their uses. Relative pronouns. The reading of 100 pages of easy stories and plays. 5 hours.

**3. Elementary Spanish.** Interrogative adjectives and pronouns. The imperative mood; the subjunctive mood. Past, future, and compound tenses of the subjunctive. Sequence of tenses. Conditions contrary to fact. Orthographic changes. Verbs with inceptive endings. Radical changes of verbs of the second and third class. The infinitive. Prepositions before an infinitive. Irregular verbs. Letter writing. Business letters. Introduction to commercial forms. Spanish life. Reading of 150 pages of easy texts. 5 hours.

**Second Year Courses**

4. Intermediate Spanish. The reading of Valera's *El Pajaro Verde*; Larra's *Partir a Tiempo*; Alarcon's *Short Stories*. 5 hours.
5. Intermediate Spanish. Alarcon's *El Sombbrero de tres Picos* and *El Final de Norma*; Waxman's *A Trip to South America*. 5 hours.
6. Intermediate Spanish. The reading of Guitierrez's *El Trovador*; Valera's *Pepita Jiminez*; Valde's *José*. 5 hours.

**ADVANCED SPANISH**

10. Advanced Spanish. Three plays of Echegaray and Alarcon's *Las Paredes Oyen*. Original themes in Spanish. 5 hours.
  11. Advanced Spanish. The reading of Ayala's *Consuelo*; Caballero's *La Familia de Alvareda*; Ibanez's *La Baraca*, Lope de Vega, and *La Moza de Cantaro*. 5 hours.
  12. Advanced Spanish. A study of Cervantes' *Don Quijote* and Valde's *La Hermana San Sulpicio*. Original themes on Spanish life. 5 hours.
- 4b, 5b, 6b. Commercial Spanish. Presupposes one year of Spanish. A complete course dealing with all possible forms used in every day commerce and much original composition. The writing of reports on subjects dealing with Latin-America. 5 hours for each course.

**MUSIC**

JOHN CLARK KENDEL, A.B., Director

7. History of Music. The study of the History of Music from Primitive to Modern Times. The musical theories and instruments of Ancient Peoples. The music of the Greeks and Romans. The early Christian era. The evolution of Notation. A complete study of the development and growth of Music into a great Art.

This is a literary course which does not require technical skill. Open to all students who wish to study Music from a cultural standpoint. 3 hours—Mr. Kendel.

- 8a. Harmony. Beginning harmony. The work consists of building scales and chords in all keys and the harmonization of melodies and bases. Emphasis is laid upon original melody writing followed by the harmonization of the original melody. All thru the course the harmonization of melodies made predominant rather than of bases. Work completed to the harmonization of dominant discords and their inversions 5 hours—Mr. Kendel.

- 8b. Harmony. A continuation of 8a. Open to students that have had 8a or its equivalent. The Harmonization of the Dominant Discords, Sevenths, Ninths, and their inversions. Work done through the Diminished Seventh Chords, up to the Second Class Discords. Emphasis laid

upon harmonizing melodies and original melody writing. 5 hours—Mr. Kendel.

**8c. Harmony.** A continuation of 8b. Open to students having taken courses 8a and 8b, or their equivalent. The harmonization of Second, Third, and Fourth class discords and their inversions. Modulation to next related keys, altered and mixed chords, extraneous modulation. 5 hours—Mr. Kendel.

**9a. Harmony.** A continuation of courses 8a, 8b, 8c. Open to students having taken these courses or their equivalent. Modulation completed, enharmonic exchange, the Organ Point, Suspension, Anticipation, The Neighboring-Note, The Passing-Note, Appoggiatura. 5 hours—Mr. Kendel.

## PHYSICAL EDUCATION

SAMUEL E. ABBOTT, M.D., Director

MARGARET JOY KEYES

Courses in Play, Playground Organization and Conduct.

The aim of the modern playground is to guide the child's play impulses so as to eliminate the undesirable features, and to make it a wholesome expression of child nature and life. The recreative needs of older boys and girls and adults, add other features, which are of value in the life of a community.

The playground teacher must be able to lead and guide these activities, according to the best methods of the day. This important work demands trained teachers and leaders. The Department of Physical Education aims to prepare teachers and directors to meet this growing demand in playground work.

### 26. Physical Education

- (a) Child nature.
- (b) The nature and function of play.

This course is designed to give the student some knowledge of child nature, and the impulses and activities of child life. Child nature should be interpreted with special reference to play and other forms of activity natural to children.

The primary requirement for the playground director is knowledge of the nature and function of play; its value in the life and education of the child; and the forces in the child and his surroundings which control the development of play habits. 5 hours—Dr. Abbott.

### 27. Physical Education

- (a) Hygiene and First Aid.
- (b) Social conditions of the community.

This course is designed to give a working knowledge of the fundamentals of personal and public hygiene, and the essential elements of

First Aid. It deals with the elements of personal hygiene; the hygienic and sanitary conditions of playgrounds and buildings, and the significance of various signs that indicate poor physical condition in children. 5 hours—Dr. Abbott.

#### 28. Physical Education

The Play movement.

This course deals with the growth and development of the playground movement, and the varied activities which are carried on in them, with the manner of supervision and management. 5 hours—Miss Keyes.

#### 29. Physical Education

The practical conduct of Play and Playgrounds.

A knowledge of and skill in the practical conduct of playgrounds is the essential requirement for all playground directions. This course deals with the organization, equipment and activities of the playground. Athletics, games and plays which have proven to be the most useful and attractive in playground work. 5 hours—Dr. Abbott and Miss Keyes.

### PRACTICAL ARTS

SAMUEL MILO HADDEN, A.M., Dean

The Practical Arts Group comprises Woodwork, Metal Work, Bookbinding, Printing, Drafting, Fine Art, Accounting, Commercial Arts, Domestic Science, Household Arts. This group occupies the entire three floors of the Guggenheim building, the first floor of the Training School, the Library basement, and the greater part of the basement floor of the Administration building. There has also just been completed a cottage which is for the exclusive use of the home economics department.

Courses are varied in nature in every special department. These are arranged along both the lines of theory and practice, neither of which is sacrificed for the good of the other. Methods in teaching the subjects in the public schools are emphasized, and when a person has done his major work in his chosen division, he is fitted to do the work, with an added advantage that he is also trained to teach these subjects in the schools.

### INDUSTRIAL ART

SAMUEL MILO HADDEN, A.M.

JOHN T. McCUNNIFF, A.B.

CHARLES M. FOULK, Pd.B.

### Courses Primarily Junior College

5. **Methods in Practical Art Subjects.** The work of this course is divided into the following groups. First: Historical development of industrial education and its progress in the public schools of the United

States. Second: The influence of scientific development upon industrial conditions; its place in the public schools of the country together with its interpretation and relation to other subjects in the curriculum; the selection of materials fundamental in the organization of industrial courses in public schools and the method of attack and relation of the teacher and student in the class room. 4 hours—Mr. Hadden.

**10. Elementary Mechanical Drawing.** This course is designed to give a knowledge of the use of drawing instruments and the material customarily used in a draftsman's office. The technical phases of the work include lettering, geometrical drawing, orthographic projections, oblique projections, isometric drawings, working drawings, developments and applications. 5 hours—Mr. Hadden.

**12. Elementary Architectural Drawing.** This course includes designs, plans, elevations, and longitudinal sections of framing, doors, windows, sills, rafters, etc., in building construction in its application to work for barns, outbuildings and residences. It also includes the making of tracings, blueprints, and specifications. 5 hours—Mr. McCunniff.

**17. Elementary Machine Design.** Here is treated the development of the helix and its application to V and square threads; conventions of material, screw threads, bolts and nuts, rivets, keys, etc. Sketches, drawings, and tracings are made from simple machine parts, such as collars, face plate, screw center, clamps, brackets, couplings, simple bearings and pulleys. Standardized proportions are used in all drawings. 5 hours—Mr. McCunniff.

**2. Intermediate Woodwork.** This course is designed for those who wish to become proficient in the use of wood working tools and where the student has at his disposal sufficient tools to carry on the work. The course includes the making of drawings from which cabinet work can be executed. The building of furniture and useful household articles such as tabourettes, library tables, writing desks, piano benches, music cabinets, medicine cabinets, etc. The student must have had sufficient practice with wood working tools to be able to select and put to use the ordinary tools used in cabinet making.

The student will be allowed to select the projects on which he is to work from a list that will be submitted by the instructor or he may choose some other, but must submit drawings or cut of same for approval. The list of articles that can be submitted by the instructor includes something like one hundred different designs.

No set text is used in this course. The student executes the work as definitely outlined by the instructor. A very thoro bibliography is furnished from which the student can select books that will fit his particular wants. 5 hours—Mr. Foulk.

**Courses Primarily Senior College**

**11. Advanced Mechanical Drawing.** This course presupposes some training in drawing and also some fundamental notions in mathematics. The material of the course is as follows: the theory of orthographic projections, or the art of representing a definite body in a space upon two coordinate planes at right angles with each other. The work consists of projections of lines, surfaces and solids, also the shadows of lines, surfaces, and solids upon planes of projection shading and applications. Prerequisite course 10 or its equivalent. 5 hours—Mr. Hadden.

**13. Advanced Architectural Drawing.** This course is a continuation of Course 12, and deals with the drawing of plans for cement, brick, and stone structures, culminating in a complete set of plans and specifications for a residence or a public building of moderate cost. 5 hours—Mr. McCunniff.

**18. Advanced Machine Design.** A study is made of the transmission of motion by belt and pulley, and gears and cams. Such curves as the involute, cycloid, and epicycloid are applied in the designing of gears. Sketches, detail, and assembly drawings are made of intricate pieces of machinery, such as the globe valve, vise, head stock lathe, and such shop machinery as lathes, band saws, motors, and gas and steam engines. 5 hours—Mr. McCunniff.

**4. Pre-Vocational Education.** This course is divided into two definite sections. First: Material of pre-vocational education or attempts that have been made to solve the problem in rural schools, city school systems, state schools and special government and private schools. Second: The basis for the collection of data fundamental in the selection of material that will give a basis for the interpretation and application of pre-vocational to the needs of the child in the public school.

This course is especially organized so that the work can be done in non-residence. 5 hours—Mr. Hadden.

**FINE AND APPLIED ARTS**

WALTER F. ISAACS, B.S.  
AGNES HOLMES, Pd.M.

**Courses Primarily Junior College**

**1. Elementary Drawing and Design.** In this course a wide range of problems in public school drawing is taken up in a brief manner to give the student a general knowledge of the subject. Those students who are taking their majors in the department lay a foundation for their future work, and others who elect the course find it an aid in their teaching. The course includes the following subjects: (a) Freehand drawing of objects in accented outline; linear perspective; nature drawing; lectures on methods of teaching are given. 2 hours.

(b) The study of elementary design principles. Exercises involving line, space, and color. Simple problems in construction. 3 hours—Mr. Isaacs.

**2. Applied Design.** The construction and decoration of notebook covers, desk pads, and similar articles; theory of design in its relation to useful objects; the application of original designs by block printing on curtains, table runners, or pillow covers. 5 hours—Miss Holmes.

**4. Design and Composition.** The work begins with the theory of space filling and color harmony; abstract exercises in filling the square and circle, using geometric units, giving attention to line, value, and color. This is followed by a few practical problems carefully executed. Prerequisite: Courses 1 and 2. 5 hours—Mr. Isaacs.

**9. History of Painting.** The evolution of painting from the beginning of history; the growth of the great schools and their influences; the study of the important masters, discussing their personalities as related to their painting, and their work as an index to the time in which they lived; illustrated by a large collection of photographs and lantern slides. Lectures with related reading. 2 hours—Mr. Isaacs.

### HOME ECONOMICS

MERLE KISSICK, Ph.B., A.B.

FLORENCE REDIFER, A.B.

### HOUSEHOLD ARTS

#### Courses Primarily Junior College

**5. Millinery.** The purpose of the course is to train the student in discriminating power from the consumer's point of view; to give a working basis of design applied to hats and to the general lines of the figure; to develop technique in handling millinery fabrics. To this end the lessons consist in very simple problems in hat design requiring no ability to sketch, draw, or any previous training in design; book reviews contributing to an intelligent understanding of the problems in hat construction; and directions in shop methods of remodelling and building hats with actual practice in the processes. 5 hours—Miss Kissick.

#### Courses Primarily Senior College

**6. Textiles.** This course deals with the physical, microscopical and chemical analysis of fibers and fabrics. There is laboratory work with hand microscopes, compound microscopes and chemicals.

Supplementary experimental study are papers in review of chapters from textile books and on general topics dealing with the factors related to the textile field. The course cannot be taken unless the student has access to a limited amount of Biological and Chemical Laboratory equipment. 5 hours—Miss Kissick.

**21. Interior Decoration.** The work in this course is designed to help the student to a clear appreciation of the fundamental principles underlying designs in their relation and application to the interior of a house. To this end an intelligent and analytical study is made of the factors which make these basic principles. Attention is given to a washable color theory; to the study of line and form as problems in composition generally; to an analysis of the structural elements comprising the room as a whole—walls, floor, openings; to the materials into which the room is completed in unity with the structural elements—draperies, floor coverings, foreground materials (for example, pictures, brass, furniture, lighting, et cetera). The course will be accomplished by chapter and book reviews, magazine references when the magazines are available—exercises in illustrative material requiring no training in drawing or interior decoration. 5 hours—Miss Kissick.

#### HOUSEHOLD SCIENCE

##### Courses Primarily Junior College

###### 5. Housewifery and Sanitation

I. Treats of the site, surroundings and construction of the house; heating, lighting, ventilation, water supply, drainage and disposal of garbage.

II. Treats of service in all parts of house, the importance of daily routine and systematic housekeeping; of house furnishings and all cleaning processes; of division of income and organization and management of the household. 5 hours—Miss Redifer.

##### Courses Primarily Senior College

**9. Food Production.** A study of food materials, their growth, production and manufacture, conditions of marketing, transportation and storage; adulterations and Pure Food Laws. 5 hours—Miss Redifer.

#### COMMERCIAL ARTS

JEHU BENTON WHITE, B.S.

FRANK W. SHULTIS, A.M.

#### STENOGRAPHY

No regular text book will be needed for this course. The regular Gregg Shorthand text book will be forwarded to you from the Extension Department in pamphlet form. The pamphlets the student may keep, thus giving him a complete text book in pamphlet form. A charge of \$2 is made for these pamphlets, which will include test exercises for each lesson and may be used for Stenography one, two, and three.

##### Courses Primarily Junior College

**1. Stenography.** (Junior and Senior College.) This course includes six lessons on the principles of Gregg Shorthand: one to six inclusive. 5 hours—Mr. White.

**2. Stenography.** (Junior and Senior College.) Prerequisite: Stenography one. This course covers six lessons in Gregg Shorthand: seventh to thirteenth inclusive. 5 hours—Mr. White.

### TYPEWRITING

For all courses given in Typewriting, you will need the Rational Typewriting Manual published by the Gregg Publishing Co., Chicago, Ill.; price, one dollar.

Any standard make of typewriter may be used.

**11. Typewriting.** (Junior and Senior College.) Beginning work in touch typewriting, covering position at the machine, memorizing of keyboard, proper touch, and correct fingering, with instruction in the care of the machines.

This course covers the first ten lessons of the Rational Typewriting Manual together with other material which will be forwarded from the Extension Department from time to time. 5 hours—Mr. White.

**12. Typewriting.** Prerequisite typewriting 11 or its equivalent. In this course we will study the approved forms of business letters, proper spacing and placing on a page.

Use the same text as Typewriting 11. 5 hours—Mr. White.

**21. Elementary Accounting.** Fundamental principles of double entry. Use of the journal and ledger. Making of the trial balance and statements. Cash book, purchase, and sales book introduced. 5 hours—Mr. Shultis.

**22. Intermediate Accounting.** Commercial paper, bill-book, invoice book, bills of lading, special column books. A set of books on wholesale accounts. Prerequisite course 21. 5 hours—Mr. Shultis.

**23. Advanced Accounting.** Corporation Accounting. This deals with the organization of corporations under the laws of Colorado. Books are kept illustrating the commission business. Prerequisite course 21. 5 hours—Mr. Shultis.

**30. Household Accounting.** This is an elementary course. It will be open to all who wish to take it, but it is intended for those teaching domestic science. 5 hours—Mr. Shultis.

**25. Commercial Arithmetic.** This course is intended primarily for commercial students, but is well adapted to those who want a good stiff arithmetic review. There will be a rapid review of the four fundamental operations and fractions. A thorough treatment of percentage and its applications will be given. Only the most modern methods will be used. 5 hours—Mr. Shultis.

**29. Farm Accounting.** This work will be made simple enough for those to take who have not had any previous work in bookkeeping. It is

especially recommended to those who teach agriculture. 5 hours—Mr. Shultis.

**26a. Penmanship.** Drills in free-arm movement writing. Mastery of position and movement expected. Study of the forms of the letters and figures. 5 hours—Mr. Shultis.

**26b. Penmanship.** Drill work to develop better form. Much attention given to the spacing and height of letters. Methods of teaching. Exercises in the use of Freeman Scale. 5 hours—Mr. Shultis.

**26c. Penmanship.** Drill exercises continued. Sentence and paragraph writing. Readings on how to teach and supervise. 5 hours—Mr. Shultis.

#### Courses Primarily Senior College

**3. Stenography.** (Junior and Senior College.) Prerequisite: Stenography one and two. This course finishes the study of the principles of Gregg Shorthand. Stenography 3 also includes a study of the Principles and Methods of Commercial Education by Kahn & Klein. This book may be reported on at any time. 5 hours—Mr. White.

Principles and Methods of Commercial Education by Kahn & Klein.  
\$1.25. 1914, MacMillan.

**13. Typewriting.** (Junior and Senior College.) Prerequisite typewriting 11 and 12 or their equivalent. This course will deal with typing, arranging, etc., legal documents of all kinds: deeds, mortgages, leases, contracts, power of attorney, statements, tabulating, etc.

Same text as is used in Typewriting 11 and 12. 5 hours—Mr. White.

**24. Bank Accounting.** This includes a study of the state and national banking laws; loans and discounts; commercial paper; methods and principles of banking; savings accounts. A set of books illustrating several days of business will be given. Prerequisite course 21. 5 hours—Mr. Shultis.

**32. Cost Accounting.** Importance of cost accounting in a business. Material cost; labor cost, overhead expense, distribution of expense. A set of books will be prepared on manufacturing costs. Prerequisite course 21. 5 hours—Mr. Shultis.

**33. Theory of Accounts.** A study of the principles of accounting with some accounting problems. Prerequisite fifteen hours of bookkeeping. 5 hours—Mr. Shultis.

## AGRICULTURE

HORACE J. KRAFT, A.M.

While no courses in Agriculture are listed in this Bulletin, the courses in Agriculture and Nature Study may be arranged for by correspondence with the Director of Extension Service.





UNIVERSITY OF ILLINOIS-URBANA



3 0112 111486798